these workers. However, the continual shifting of names and the dividing of satisfactory groups are sure to excite strong protests. No one wishes to return to the Linnaean conception of genera, but the tendency toward the other extreme seems less attractive. Names are for the use of people who talk or write about things, and names whose meanings are frequently changed are unfitted for any purpose.

Old generic names become endeared by long familiarity, but some of them must be sacrificed to the iron law of priority. We concede present convenience for promised fixity, but are we getting it? Certainly the busy genus maker is not helping us. *Anthus, Buteo, Chaetura, Diomedea, Empidonax, Fringilla,* and other old generic names are associated with certain birds, and I hope these names will be with us for a long time. When such names are displaced, shifted to other genera, or otherwise modified in significance, it is difficult to accept the changes in a kindly spirit. When the changes result from giving generic rank to weak subgenera, one is inclined to doubt the value of other work of the author who proposes such changes.

The names of the birds of Europe and of North America have been worked over so carefully that they should be fairly well settled. If they are not, what hope is there for the nomenclature of the birds of Asia, Africa and South America?

Manila, P. I., February 26, 1921.

A SYNOPSIS OF CALIFORNIA'S FOSSIL BIRDS

By LOYE MILLER

DURING the several years that have elapsed since a previous synopsis of the Pacific coast fossil birds appeared in the *Condor* (Miller, 1911), our knowledge of the ancient faunas has made considerable advancement. The present writer has been especially occupied with an extended paper on the avifauna of Rancho La Brea. It seems improbable however that this memoir will be off the press for some time to come; hence it is thought advisable to announce to those interested in the subject, some of the results of recent activity in the California field.

Since the latest general paper on the subject was published by the writer (Miller, 1912) a new bird-bearing horizon, the Upper San Pedro Pleistocene has been explored (Miller, 1914). These beds yielded sixteen species of birds none of which are extinct. Bird remains from the Pliocene of Santa Monica and of San Diego have been collected by Dr. F. C. Clark of Los Angeles. These represent some species of auklet and a goose not distinguishable from *Branta canadensis.* Mr. E. J. Porteous of Lompoc, keeping the interests of science at heart, has rescued from the commercial quarries in the Miocene diatom beds of that region some most interesting bird remains. These specimens were generously turned over to the writer by Dr. David Starr Jordan. They are found to represent a new species of shearwater, two species of gannet, and one as yet indeterminate species of shore bird. This material includes the major portion of the skeleton of each of some ten or more individuals, a fact that is readily seen to hold considerable interest when one considers that a

single fragment of a humerus represents the total previously known bird remains from California deposits older than Pleistocene (Lucas, 1901).

Study of the enormous mass of bird material assembled at the University of California and at the Los Angeles Museum of History, Science and Art has been productive of most interesting results. The following is a synopsis of this work, only part of which has been made public.

Apologies are offered for one synonym imposed upon the literature of ornithology. *Pleistogyps rex* (Miller, 1910), based on a tarso-metatarsus, must give way to *Teratornis merriami* (Miller, 1909), previously established upon a skull and pectoral arch. Repeated occurrence of the two in the same section of the excavations forces the conclusion that the great bird known from the skull and pectoral parts was mounted upon the relatively frail posterior limbs ascribed to *Pleistogyps rex*. The latter genus and species is hereby officially cremated. Two members of the family of old vultures, heretofore unknown in the western hemisphere, have been described (Miller, 1916b). The species *Pavo californicus* Miller has been assigned to a new genus, *Parapavo* (Miller, 1916a), intermediate between the old world *Pavo* and the new world *Agriocharis* of Yucatan. The anomalous walking eagle, *Morphnus daggetti*, has been described (Miller, 1915) as analogous and not homologous with *Serpentarius* of South Africa.

Gavia, *Ajaia*, *Plegadis*, *Geococcyx*, and two species of the Columbidae, listed as lipotypes in 1912, have been added to the Pleistocene fauna. The meager remains first assigned to *Polyborus tharus* are considered, after study of more abundant material, to belong to the species *P. cheriway*. *Botaurus lentiginosus*, *Grus americana*, *Accipiter cooperi*, and *Falco columbarius* have been added to the California list of Pleistocene species. The species *Agelaius gubernator*, *Xanthocephalus xanthocephalus*, *Euphagus cyanocephalus*, and *Otocoris alpestris* are considered best dropped from the rolls at present. Although the Pleistocene remains studied are not distinguishable to the writer's eye from the four above-mentioned local birds, it is assuming too much on his part to assert the identity thereof. The identity is not considered proven. More complete material representing the Recent falcons makes it seem advisable to drop *Falco peregrinus* and add *F. mexicanus* in its stead.

Eliminating tentative assignments from the list, there are now known some sixty-four species of birds from Pleistocene horizons, and one from the Miocene, of California. The state of Oregon exceeds this record by some five or six species.

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